

REMARKS

The Examiner has rejected Claims 1, 3, 4, 7, 8, and 9 on the grounds of non-statutory obviousness-type double patenting as being unpatentable over Claim 33 of U.S. Patent No. 6,828,980 in view of Donovan et al. (U.S. Patent No. 6,593,923). Applicant asserts that such rejection is overcome in view of the filing of the terminal disclaimer submitted herewith.

The Examiner has rejected Claims 1-17 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner has argued that in Claims 1, 16, and 17, "it is not clear if Δ is a function of X or if Δ is multiplied with X." Applicant respectfully disagrees and points out that such claims specifically require that " Δ includes a value read from a texture map." As a result, the above claims are clearly definite.

The Examiner has rejected Claims 1-17 under 35 U.S.C. 101, as being directed toward non-statutory subject matter. Specifically, with respect to Claim 16, the Examiner has suggested "chang[ing] the language of the claim to 'a computer readable medium embodied with a computer program for computer graphics processing'." Applicant respectfully asserts that the preamble of Claim 16 already claims "[a] computer program embodied on a computer readable medium for computer graphics processing" (emphasis added), as claimed, therefore making Claim 16 statutory.

Further, applicant respectfully disagrees with the Examiner's assertions. Clearly, any [new and useful] process, machine, manufacture or composition of matter under the sun that is made by man is the proper subject matter of a patent. *Alappat*, 33 F.3d at 1542, 31 USPQ2d at 1556; *Warmerdam*, 33 F.3d at 1358, 31 USPQ2d at 1757 (Fed. Cir. 1994)

The subject matter that courts have found to be outside of, or exceptions to, such four statutory categories of invention is limited to abstract ideas, laws of nature and

natural phenomena. In the present case, the claims at issue clearly do not fall into such categories. Further, even if the Examiner were to attempt to argue that the claims at issue did allegedly fall into such categories, applicant asserts that the claims are clearly directed to a practical application thereof.

Per MPEP 2106, “[a] claimed invention is directed to a practical application of a 35 U.S.C. 101 judicial exception when it:

(A) ‘transforms’ an article or physical object to a different state or thing; or

(B) otherwise produces a useful, concrete and tangible result.”

In the present case, applicant teaches and claims “modifying a value (x) based on an algorithm; and performing an operation on pixel data.” By virtue of the claimed “modifying” and “performing” (as claimed), applicant clearly teaches and claims a “transformation” of an article or physical object to a different state or thing. Further, such specifically claimed substantial limitations highlighted above clearly constitute a useful feature that provides a tangible real-world result, namely “an operation on pixel data” (as claimed), which can be substantially repeatable or substantially produce the same result again.

For these and various other reasons, applicant respectfully contends that the claims at issue clearly meet the requirements of 35 U.S.C. 101. Applicant further draws the Examiner’s attention to the amendments made hereinabove to at least some of the independent claims which further render the present rejection moot.

The Examiner has rejected Claims 1-3, 6, 8, 16, and 17 under 35 U.S.C. 102(e) as being anticipated by Aleksic (U.S. Patent No. 6,175,368). Further, the Examiner has rejected Claims 4-5, and 9-11 under 103(a) as being unpatentable over Aleksic, in further view of Donovan (U.S. Patent No. 6,593,923). Applicant respectfully disagrees with such rejections, especially in view of the amendments made hereinabove to each of the

independent claims. Specifically, applicant has amended independent Claims 1, 16, and 17 to at least substantially include the subject matter of former dependent Claim 4. Further, Claim 5 has been amended in independent form.

Applicant respectfully asserts that Donovan and the present application were both owned by and/or subject to an obligation of assignment to NVIDIA Corporation, at the time of invention of the subject matter in the present application. Thus, Donovan is believed to be disqualified as a prior art reference under 35 U.S.C. 103(c).

In particular, the Donovan reference did not issue more than one-year before the filing date of the present application (03/18/2004), and is thus not eligible to support a rejection under 35 U.S.C. 102(b). Therefore, the rejection of Claims 4-5, and 9-11 under 35 U.S.C. 103(a) is based on 35 U.S.C. 102(e) prior art. As a result, Donovan is disqualified as prior art to the present invention under 35 U.S.C. 103(c). Please find the attached statement signed by an attorney of record indicating that Donovan and the present application were both owned by and/or subject to an obligation of assignment to NVIDIA Corporation, at the time of invention of the subject matter in the present application.

With respect to the subject matter of former Claim 4 (now at least substantially incorporated into independent Claims 1, 16, and 17), the Examiner has relied on Col. 8, lines 52-54; Col. 9, lines 34-50; and Col. 11, lines 10-17 and 35-49 from the commonly owned Donovan reference to make a prior art showing of applicant's claimed technique "wherein the modifying is based on a depth-component of the algorithm" (see this or similar, but not necessarily identical language in the aforementioned independent claims). Further, the Examiner has admitted that "Aleksic does not explicitly teach modifying based on a depth-component of the algorithm." Thus, applicant respectfully asserts that independent Claims 1, 16, and 17 are deemed allowable by virtue of the disqualification of the commonly owned Donovan reference.

In addition, with respect to the subject matter of new independent Claim 5, the Examiner has relied on Col. 2, lines 41-46 from the commonly owned Donovan reference to make a prior art showing of applicant's claimed technique "wherein the modifying allows a lighting operation to display the interaction of displayed objects" (as currently amended). Further, the Examiner has admitted that "Aleksic does not explicitly teach that modifying allows the lighting operation to display the interaction of displayed objects." Thus, applicant respectfully asserts that independent Claim 5 is also deemed allowable by virtue of the disqualification of the commonly owned Donovan reference.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

Applicant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, by virtue of the disqualification of the Donovan reference. Thus, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The

Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No. NVIDP015A).

Respectfully submitted,
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